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Notice of Allowability	Application No.	Applicant(s)	
	09/810,940	BILIC ET AL.	
	Examiner	Art Unit	
	Kwang B. Yao	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 10/11/05.
2. ☒ The allowed claim(s) is/are 1,4-27,30-50, renumbered 1-46. respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance:

The present invention is directed to a network interface device. Each independent claim identifies the uniquely distinct features: regarding claim 1, receive logic, which is coupled to receive from a network a sequence of data packets, each packet comprising respective header data; a protocol processor, coupled to read and process the header data so as to identify a group of the received packets that contain respective fragments of a data frame, the fragments having a fragment order within the data frame; and host interface logic, which is coupled to a host memory accessible by a host processor, and is controlled by the protocol processor so that irrespective of whether the sequence in which the packets are received coincides with the fragment order, the host interface logic allocates space for the data frame in the host memory responsively to the header data of the packet received first in the sequence among the packets in the group, and reassembles the fragments of the data frame in the fragment order in the space allocated in the host memory before processing of the reassembled data frame by the host processor; regarding claim 25 (originally filed claim 27), receiving a sequence of data packets from the network at a network adapter, each packet comprising respective header data; processing the header data in the adapter so as to identify a group of the received packets that contain respective fragments of a data frame, the fragments having a fragment order within the data frame; allocating space for the data frame in a host memory accessible by the host processor, responsively to the header data of the packet received first in the sequence among the packets in the group, regardless of whether the packet received first in the sequence is first in the fragment order; writing the fragments of the data frame from the network adapter to the space

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allocated in the host memory so that the fragments are reassembled in the space in the fragment order before processing of the reassembled data frame by the host processor irrespective of whether the sequence in which the packets are received coincides with the fragment order; and notifying the host processor when all of the fragments have been reassembled. The closest prior art, Gaddis et al. (US 5,815,501) and Cowger et al. (US 6,314,477) disclose conventional communication systems, either singularly or in combination, fail to anticipate or render the above features obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang B. Yao whose telephone number is 571-272-3182. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KWANG BIN YAO
PRIMARY EXAMINER



Kwang B. Yao
December 12, 2005